

10/01/13

Agenda

- Opener
- Review Homework 2.2
p. 91-93 (12-32 evens, 38-42 evens, 66)
- Assignment Sheets & Targets
- Section 2.2 - Solving Two Step Equations
 - Review & Wrap up
- Worksheet - Solving 1 & 2 Step Equations

Warm up:

Simplify:

$$-2(2x-4)$$

$$-4x+8$$

$$-2 \begin{array}{|c|c|} \hline 2x & -4 \\ \hline -4x & +8 \\ \hline \end{array}$$

$$-4x+8$$

$$6m+7+m+6$$

$$7m+13$$

Section 2.2 - Solving 2-Step Equations

Review:

PEMDAS ↑

$$\begin{array}{r} 5y - 13 = 17 \\ +13 \quad +13 \\ \hline 5y = 30 \\ \div 5 \quad \div 5 \\ y = 6 \end{array}$$

$$\frac{x}{12} - 9 = -11$$

$$+9 \quad +9$$

$$\begin{array}{c} \overbrace{12\left(\frac{x}{12}\right)} = (-2)12 \\ x = -24 \end{array}$$

Solving with
2 terms in a
Numerator:

$$3\left(\frac{x-7}{3}\right) = (-12) \cdot 3$$

$$\begin{array}{r} x - 7 = -36 \\ +7 \quad +7 \end{array}$$

$$x = -29$$

You Try:

$$5\left(\frac{b+3}{5}\right) = (-1) \cdot 5$$

$$\begin{array}{r} b + 3 = -5 \\ \dots -3 \quad -3 \end{array}$$

$$b = -8$$

Section 2.2 - Solving 2-Step Equations

Using an Equation
as a Model:

Community Service You are making a bulletin board to advertise community service opportunities in your town. You plan to use half a sheet of construction paper for each ad. You need 5 sheets of construction paper for a title banner. You have 18 sheets of construction paper. How many ads can you make?

Key Info.

5 SHEETS - BANNER
18 SHEETS TOTAL $a = \# \text{ ads}$
 $\frac{1}{2}$ SHEET PER AD

Equation

$\# \text{ SHEETS FOR ADS} + \# \text{ SHEETS BANNER} = \text{TOTAL SHEETS}$

Solution

$$\begin{aligned} \frac{1}{2}a + 5 &= 18 \\ -5 &\quad -5 \\ \hline 2\left(\frac{1}{2}a\right) &= (13) \\ a &= 26 \end{aligned}$$

Summary:

With two step equations, remember to reverse the order of operations. If there are multiple terms in the numerator, get rid of the denominator first.

Check your answer when you are done!!!